

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method of identifying individuals ~~predisposed~~ predisposed to schizophrenia comprising:

- a) providing a nucleic acid from a human subject; wherein said nucleic acid comprises an $\alpha 7$ allele;
- b) detecting the presence of at least one polymorphism within a core promoter region corresponding to SEQ ID NO:125 of said $\alpha 7$ allele, wherein said at least one polymorphism contributes to reduced transcription; and
- c) correlating the presence of said at least one polymorphism with a predisposition to schizophrenia.

2. (currently amended) The method of Claim 1, wherein said at least one polymorphism comprises one or more of a -241 A to G substitution, a -194 G to C substitution, a -191 G to A substitution, ~~a -190 G insertion, a -180 G to C substitution, a -178 CGGGGG insertion, a -178 G deletion, a -166 C to T substitution, a -143 G to A substitution, a -140 CGGG insertion, a -93 C to G substitution, a -92 G to A substitution, substitution, and a -86 C to T substitution, and a -46 G to T substitution~~ in relation to a start codon of said $\alpha 7$ allele beginning at residue 270 of SEQ ID NO:125.

3-4. (canceled)

5. (original) The method of Claim 1, wherein said detecting step is accomplished using at least one technique selected from the group consisting of polymerase chain reaction, heteroduplex analysis, single stand conformational polymorphism analysis, denaturing high performance liquid chromatography, ligase chain reaction, comparative genome hybridisation, Southern blotting and sequencing.

6. (original) The method of Claim 1, wherein said nucleic acid from said subject is derived from a sample selected from the group consisting of a biopsy material and blood.

7. (currently amended) The method of Claim 1, further comprising step d) providing a diagnosis of schizophrenia to said subject based on the presence ~~or absence~~ of said at least one polymorphism and a physician interview.

8. (original) The method of Claim 7, wherein said diagnosis differentiates schizophrenia from other forms of mental illness.

9-25. (canceled)

26. (new) A method of identifying individuals predisposed to schizophrenia comprising:

- a) providing a nucleic acid from a human subject; wherein said nucleic acid comprises an $\alpha 7$ allele;
- b) detecting the presence of at least one polymorphism within said $\alpha 7$ allele, wherein said at least one polymorphism comprises one or more of a –241 A to G substitution, a –194 G to C substitution, a –191 G to A substitution, a –180 G to C substitution, a –178 G deletion, a –143 G to A substitution, a –92 G to A substitution, and a –86 C to T substitution in relation to a start codon of said $\alpha 7$ allele beginning at residue 270 of SEQ ID NO:125; and
- c) correlating the presence of said at least one polymorphism with a predisposition to schizophrenia.

27. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –241 A to G substitution.

28. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –194 G to C substitution.

29. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –191 G to A substitution.

30. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –180 G to C substitution.

31. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –178 G deletion.

31. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –143 G to A substitution.

32. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –92 G to A substitution.

33. (new) The method of Claim 26, wherein said at least one polymorphism comprises a –86 C to T substitution.

34. (new) The method of Claim 26, wherein said detecting step is accomplished using at least one technique selected from the group consisting of polymerase chain reaction, heteroduplex analysis, single strand conformational polymorphism analysis, denaturing high performance liquid chromatography, ligase chain reaction, comparative genome hybridisation, Southern blotting and sequencing.

35. (new) The method of Claim 26, wherein said nucleic acid from said subject is derived from a sample selected from the group consisting of a biopsy material and blood.

36. (new) The method of Claim 26, further comprising step d) providing a diagnosis of schizophrenia to said subject based on the presence of said at least one polymorphism and a physician interview.

37. (new) The method of Claim 36, wherein said diagnosis differentiates schizophrenia from other forms of mental illness.